Under Preservation

App. F. IX-4

1935. (Medical

Previous References
Med 136-32 & 1-10.

File No. 328-34
Serial Nos. 1-13.

Letter References.
Med 106-36 & 1-4.

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 13.

Part B for September 36.

SUBJECT.

Report of the Committee re Cultivation of the Medicinal plants + Herbs in the State.

Sl 13.

WD 0418—GPB—22,500—29-8-36

To

G 1587-92 & 3.9.36.

The Local Surgeon
The Chief Conservator of Forests
The Dr. of Agriculture. The Dr. of D+E
The Registrar Mysore University.

Please offer your views on the report of the Committee to investigate what Medicinal plants + herbs can be grown in the State + Suggest measures to promote their Cultivation.

THE OFFICE OF THE HON'BLE THE RESIDENT
IN MYSORE,
Bangalore, the 3rd May 1935.

for 5-37.
med. 328-34-1

No. F.574-35
R.O.II

A copy of the undermentioned paper is forwarded with compliments to the Chief Secretary to the Government of His Highness the Maharaja of Mysore, B a n g a l o r e - - for information.

By order, etc.,

for SECRETARY TO THE RESIDENT.

MAY 1935

- - - -

Circular letter from the Government of India in the Department of Education, Health and Lands No.F.59-XI/34-H, dated the 28th February 1935, with enclosures.

Subd

1) Only one copy Each of the ~~Govt order~~ communication has been need. + ~~with~~ the same will, if asked, be sent to the Pr Surgeon Subd with a Obl-.

BJ
2/5

17 MAY 1935

Bsd Ale
14/5/35

2) For perusal before issue

3) Gen: Secy)

17/5

Report of Drugs Enquiry Committee.

1594

4)
The papers need may be forwarded to the S.S. & he may be requested to furnish a note* as to what medicinal plants could be usefully Grown in Mysore & in what areas

(The 2/7/35

* i.e. relating to consultation with the Dir. Agr.

5) Revised off subd.
Bdg 28/5/35

6) 2/7/35

G 10650 & 4.6.35
The Senior Surgeon:
Requests to furnish a note in Consultation with the Director of Agriculture as to what medicinal plants could be usefully grown in Mysore & in what areas.

DRUGS ENQUIRY SECTION 28 MAY 1935 GENL & REV. SECTT.

2

Sec. Mtg 13/6/35

3 From the Director of Agriculture in Mysore.
Letter No. R.O.C. 3146-N.C. 842/34-35 dated 20/9/1935.

Forwards a copy of his letter addressed to the Senior Surgeon regarding growing of medicinal plants & herbs in Mysore.

7) Subd. for perusal. The note on the subject called for from the Snr. Surgeon, will, if approved, be awaited.

CB 24/9/35

2/9/35

GENL. & MIS. BRANCH 25 SEP. 1935 NOTE—Contn. Sheet. GENL. & REV. SECTT.

Medical file 328-34

F. & W.O. No. 16.
M. 22.10.35.

Returned with compliments.

13) The following plants are found scattered in the Forests of the State.

1. Abrus precatorius
2. Adhatoda vasica
3. Aegle marmelos
4. Alangium lamarckii
5. Alstonia scholaris
6. Anona squmaosa
7. Bassia latifolia
8. Butea frondosa
9. Caesalpinia bonducella
10. Calotropis gigantea
11. Datura stramonium
12. Holarrhena antidysenterica
13. Mallotus phillippinensis
14. Melia azadirachta
15. Pongamia glabra
16. Saraca ~~kx~~ indica
17. Semicarpus anacardium
18. Solanum indicum
19. Terminalia arjuna
20. Toddalia aculeata
21. Acacia arabica
22. Cassia fistula
23. Cassia augustifolia
24. Santalum album
25. Strychnos nux vomica
26. Hydnocarpus wightlana

M. Madhaya

Offg. Chief Conservator of Forests.

To

The General Secretary to the Government of H.H. the Maharaja of Mysore, Bangalore.

C11/22-10-35.

GENL. & MIS. BRANCH
23. OCT. 1935
GENL. & REV. SECTN.

Certain information re the Cultivation of the Medicinal Plants & Herbs in India

[App. F. III-2

General and Revenue Secretariat.

File No. Med 328 of 1934

608

14) The papers under disposal (P & O) have been sent for information

15) In accordance with the Govt Secty's instructions at paras 4 & 11 supra, the remarks of the Director of Agriculture & the Chief Conservator of Forests on the subject have been obtained

Flags Q & R

Submitted for orders.

Asst Sec 23-10-35

15) Please see note 25/10

16) Refer :— Paras 1 to 4 Supra. 29/10/35

Gen : Secy)

17) The papers received from the Residency and the letter of the Surgeon Gen dt 25/9/35 are subd for perusal.

The Ch. Conser. of Fts has noted in para 13 above what plants are found scattered in the forests in the State.

The Principal of the Ayurvedic & Unani Med School in Mysore, should be able to say what names these plants have in Skt and Urdu and what action can be taken to grow them or foster their growth.

18) The Asst Secy may be pleased to put

NOTE—Contn. Sheet.

Improvement re: the Cultivation of the Medicinal plants & herbs in the State -

General and Revenue Secretariat — Med File No. 328 of 1934 1553 [App. F. III—2

Serial No.

24) Subd with reference to the Member's minute dated 4/11/ above.

25) Dr Aswathanarayana Rao saw me on Saturday last. He said that his work is related only to the British Pharmacopoeia and which of the plants mentioned would correspond to the drugs he has to get requires to be examined. He suggested that a small Committee with members from the Forest, Agricultural, Medical and the University Botany depts may be constituted to examine the question and make a report. He said also that if so ordered he would prepare a note on the case and submit it.

26) ~~The file with~~ In the circs the Director of Ind & Comm will kindly be requested to get a note from Dr. A. and send it on.

27) The question of constituting a Committee may be considered after the note is received.

Second Member

12/11

12/11

28) Yes

Ind 14/11/35

14/11

29) Draft Subd.

15-11-35

15/11

OFFICE OF THE SECOND MEMBER OF COUNCIL 13 NOV. 1935 No. 363

TYPING SECTION. 16. NOV. 1935 GENL DEPT.

NOTE.—Contn. Sheet.

WD 03594—GPB—30,000—18-7-35

D 3633

Cultivation of medicinal plants
Herbs - D 3633

General and Revenue Secretariat | File No. 328 of 1934 | [App. F. III—2

Serial No.

No. 209/MD dated 1-1-36

Paper file
RCD 136-32
of 1-10

32) Forwarded to with compliments to the Sr Surgeon in Mysore for favour of remarks.

M. Venkatesaiyengar
29.1.36. Govt Secy

Ro G.C. 165-1
29.1.36.

33) I am in entire agreement with the proposals of Dr Aswatha Narayana Rao. Now that we have started manufacturing a large number of drugs in the Industrial and Testing Laboratory, early steps should be taken to investigate the question of growing ~~what~~ in our forests, some at least of the raw material necessary for manufacturing drugs.

S. Subba Rao
Senior Surgeon
28.1.36

34) Ref. minute dated 29/1/36 on last page

See Member

35) I Mark

5760

NOTE.—Contn. Sheet.

WD 03594—GPB—30,000—18-7-35

Cultivation of medicinal plants & herbs in the Mysore State.

General and Revenue Secretariat — Med File No. 328 of 1934. — [App. F. III—2

Serial No. 8

No. G. 6390-6 Dated 15/2/36

To The Sr. Surgeon in Mysore.
.. Chief Conser. of Fts - in Mysore.
.. Director of Ind. in Mysore.
.. Director of Agr. in Mysore.
.. Registrar, Mysore University
.. Supdt. Govt. Gardens.

Sanctions the appointment of a Committee consisting of certain members to consider what medicinal plants & herbs can be grown in the State, with advantage & to suggest the measures that might be adopted to promote their Cultivation. —

GENL. & MIS. BRANCH
24. FEB. 1936
GENL. & REV. SECTT.

From the Senior Surgeon in Mysore.
Letter No. G. C. 294-9 dated 16/5/36

Forwards for the info. of Govt. a report of the decisions arrived at by the Committee constituted to consider what medicinal plants & herbs can be grown in the State.

42) The Sr. Surgeon states that he understands that Dr. K. Aswathanarayana Rao is resigning his post, and if Govt. consider that the work of this Committee has to be continued further, Mr. Aswathanarayana Rao's

NOTE—Contn Sheet.

WD 03594—GPB—30,000—13-7-35

Cultivation of medicinal plants and herbs

General and Revenue Secretariat — Med File No. 328 of 193 4. [App. F. III—2

Serial No.

49) Draft Encd

dg 30/5

49) Draft Encd 2.6.36

TYPING SECTION. 2. JUN. 1936 GENL & REV. SECTT.

11 No. G. 9781 Dated 5/6/36

To The Senior Surgeon in Mysore.

Requests him to send a final report making clear the action recommended after further meetings of the Committee if necessary, & the successor to Dr. K. Asuvakaravayana Rao appointed as Secretary in his place as proposed by him.

Yes A 6/6/36 W 6/6/36

From the Senior Surgeon

Letter No G C 294-12 dated 29.6.1936

States that a definite scheme of action as enumerated has been outlined for adoption & that if this programme is approved, preliminary action will be taken in accordance thereof

50) Submd for orders, with ref to para 46 & 47 supra. The S.S. submits the report

4.7.36 W. to be final. If approved the progs with

NOTE—Contn Sheet.

WD 02604—GPB—30,000—13-7-35

Report of the Committee re cultivation of the Medicinal plants & Herbs in the State

General & Revenue Secretariat.

File No. Revd 328 of 1934. 3 [App. F. III–2

Serial No.

Not seen by member

57) Not handed for perusal before issue

Secy 21/8/36.

24.8.36

Dewan)

JPM 25/8

Secy 26/8

Dewan 26/8

13 No. G. 1587-92 Dy. 3/9/36

To The Senior Surgeon in Mysore.
" Chief Conservr. of Fts. in Mysore.
" Director of P & C. in Mysore.
" Director of Agri. in Mysore.
" Regr. Mysore University, Mysore.
" Supdt. Govt. Gardens.

Approves the Report of the Committee re: Cultivation of the Medicinal plants & Herbs in the State & directs that action be taken accordingly etc.

Press Sub 7-9-36 ak

Printed copies are reqd. from the Press & copies sent to the addressees.

B 10-9-36

NOTE—Contn. Sheet.

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

General and Revenue Secretariat

No. G 6650-

Dated, Bangalore, 1st June 1935

From

The *General Secretary to the Government of His Highness the Maharaja of Mysore.*

To

The Senior Surgeon in Mysore,

Bangalore.

Sir,

In forwarding herewith for information the marginally noted communications in regard to the cultivation of Medicinal plants and herbs in India, and with Memo No. 574-35 R.O. II dated 3rd May 1935 from the Secretary to the Hon'ble the Resident in Mysore, I am directed to request you kindly to furnish a note, if necessary in consultation with the Director of Agriculture in Mysore, as to what medicinal plants could be usefully grown in Mysore and in what areas.

List of papers.

1. Circular letter from the Govt. of India - Dept. of Edn. Letter No. Fr 59/X1-34 dt 20/2/35
2. Letter No.D.714/Vet.,dated the 2nd August 1934 from the Imperial Council of Agricultural Research to Lt.Col. Chopra,without enclosure.
3. Letter No.D.673/V/34, dated the 23rd July,1934, from the Imperial Council of Agricultural Research to Messrs.Smith Stenistreet and Co;Ltd., and the Bengal Chemical and Pharmaceutical works, Limited.
4. Letter No.162, dated the 26th September 1934, from Lt.Col. Chopra to the Imperial Council of Agricultural Research, with enclosure.
5. Letter No.H.C./546, dated the 8th August 1934, from Messrs.Smith Stanistreet and Co., Ltd., to the Imperial Council of Agricultural Research, with enclosure.
6. Letter No.04M/1, dated the 17th December,1934, from the Bengal Chemical and Pharmaceutical works, Limited, to the Imperial Council of Agricultural Research, with enclosure.
7. List of the various medicinal plants which are largely used in the manufacture of preparations in the Drug Factories at the Medical Stores Depots, Bombay and Madras.

I have the honour to be,
Sir,
Your most obedient servant,

For General Secretary to Govt.

mk,

Appendix F G—1]

SUBJECT .....

.....

.....

Diary No. of letter replied to 5313

General and Revenue Secretariat

( )

the 193 .

Details to be carried as at Reg II

Date of issue 4/6/35

Signed by .....

List of enclosures .....

Copied by .....

Examined by.....

Section Med

File No. 328-34

Serial No. 2

No. G/C 650/Med

To

The Sr Surgeon

In forwarding herewith for information the marginally noted Communication relative in regard to the cultivation of Medicinal Plants & Herbs in India, and with Memo No 574-35 R O II dated 3-5-1935 from the Secty to the Hon. the Resident in Mysore, I am directed to request you to kindly furnish a note, (in consultation) if necessary with the Director of Agriculture in Mysore, as to what Medicinal Plants could be usefully grown in Mysore & in what areas.

I am
Sir
Your obedt Servt
Secy

214

TEL. ADDRESS: "AGRI., BANGALORE."
Code: 5th Edition A.B.C.

DEPARTMENT OF AGRICULTURE.

MYSORE STATE.

GENL. & MIS. BRANCH. 1596 23 SEP. 1935 GENL. & REV. S BANGALORE.

18

No. Roc.3146-Hc.842/34-35.

Dated 20th September 193 5.

Med 328-34-3

FROM

B. NARASIMHA IYENGAR, ESQ., B.A., PH.D.,
DIRECTOR OF AGRICULTURE IN MYSORE,
BANGALORE.

GENL. SEC. 20 SEP. 193

To

H.V. Ramaswami, Esq., M.A.,B.L.,
General Secretary to the Government of Mysore,
Bangalore.

SIR,

As requested in your letter No.G.2172/ Med.328-34, dated 12th September 1935, I have the honour to forward herewith a copy of my letter to the Senior Surgeon re. growing of medicinal plants and herbs in Mysore.

I have the honour to be,
Sir,
Your most obedient servant,

B. Narasimhaiyengar

Director of Agriculture.

dsr

Sent to the Secretary of Industries & Commerce.

20-9-35

Roc.3146-Hc.842/34-35.

20th September 5

The Senior Surgeon with the Government

of H.H. the Maharaja of Mysore, Bangalore.

I have the honour to return herewith the list of medicinal plants sent with your No.G1.294-1/E.3. dated 20th June 1935. The remarks as to their availability in Mysore are made on the list itself by the Economic Botanist.

Except in case of Belladonnae and Digitalis which have been tried and found to grow satisfactorily, information as to growth of the other plants under cultivated conditions is not available in this Department at present.

I have the honour to be,
Sir,
Your most obedient servant,

"Copy"

Sd.-

Director of Agriculture.

"C O P Y."

GENL. & MIS. BRANCH.
1683
26 SEP. 1935
GENL. & REV. SECTT.

MYSORE MEDICAL DEPARTMENT

Telephone—No. 215

OFFICE OF THE SENIOR SURGEON IN MYSORE,

No. G.C. 294-5.
Enc. Nil.

Bangalore, dated the 25th September 1935.

Med. 328-34-4

From

Sastravaidya Pravina

S. SUBBA RAO, Esq., B.A., M.B.C.M., M.R.C.S., (Eng.) L.R.C.P., D.P.H.,

Senior Surgeon with the Government of H. H. the Maharaja of Mysore.

To

The General Secretary to the Government of
His Highness the Maharaja of Mysore, Bangalore.

Sir,

With reference to your letter No.G.10650/Med.328-34-2 dated the 4th June 1935, about the cultivation of medicinal plants and herbs in India etc., I have the honour to forward herewith, for the information of Government, a copy of letter No.Roc.3146-Hc.842/34-35 dated the 20th September 1935 received from the Director of Agriculture in Mysore, and to state that the availability or otherwise of the various drugs has been marked on the list itself by the Economic Botanist.

The Agriculture Department has not furnished any information about the exact areas in the State where even the available plants are grown, and it is not possible to furnish the information from this office.

The delay in reply to your letter was due to the non-receipt of the reply from the Director of Agriculture.

The enclosures to your letter are herewith returned in original. The Forest Department, I suggest, may also be Consulted.

I have the honour to be,

Sir,

Your most obedient servant,

S. SubbaRao.
Senior Surgeon.

CSR.

Letter No.Roc.3146-Ho.842/34-35, dated 20-9-1935, from the Director of Agriculture in Mysore, Bangalore, to the Senior Surgeon in Mysore, Bangalore.

(21)

I have the honour to return herewith the list of medicinal plants sent with your No.G1.294-1/E.3. dated 20th June 1935. The remarks as to their availability in Mysore are made on the list itself by the Economic Botanist.

Except in case of Belladonnae and Digitalis which have been tried and found to grow satisfactorily, information as to growth of the other plants under cultivated conditions is not available in this Department at present.

"Copy".

S. Subba Rao

Senior Surgeon.

CSR.

GENERAL AND REVENUE SECRETARIAT,

D. O. No. 3554/Med.328-34-5

Bangalore, Dated, 7th November 1935.

Dear Sir,

I write this to say that the General Secretary to Government, Mr.M.Venkatesa Iyengar, will be glad to discuss with you the question of the possibility of growing medicinal plants and herbs in the State, and to request you to make it convenient to meet him in his office during office hours on any day convenient to you within the next few days.

Yours sincerely,

Dr.K.Aswathanarayana Rao, D.Sc.,

Superintendent, Industrial and Testing

Laborataries, Malleswaram, Bangalore.

Appendix F G—1]

SUBJECT .....

.....

.....

Section Med

File No. 328-34

Serial No. 6

Diary No. of letter replied to D-6, No. 35554

General and Revenue Secretariat

( )

the *193* .

Date of issue 7/11/35

Signed by Asst. S. of S.

List of enclosures .....

Copied by .....

Examined by .....

To Dear Sir,

I write this to say that the General Secretary to Govt, Mr M. Venkatasamy will be glad to discuss with you the question of the possibility of growing medicinal plants and herbs in the State and to request you to make it convenient to meet him during office hours in his office. Can any day convenient to you within the next few

WD 01956—GPB—22,500—12-6-34

Appendix F G—1]

SUBJECT.....

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Section MD

File No. 328-34

Serial No. 6

Diary No. of letter replied to.....1683

No 4037 / MD 8

To

The ~~Natife~~ Director of Industries & Commerce

General and Revenue Secretariat

( )

the *193*

Sir,

In forwarding herewith the Communication noted on the margin in the matter of the cultivation of Medicinal plants & herbs in the Mysore State I am directed to request you to kindly arrange to obtain & submit a note from Dr K. Aswathia Narayana Rao suitable after Pharmaceutical & Testing Laboratory on the subject. The [x] of the communication sent in original may kindly be returned with your reply.

I have

the honour to be

Sir

Your Obdt Servt

15/11

for Secy

Date of issue.....11.11.35.....

Signed by .....

1) Letter No 54 XI 34-H dated 28-2-1935 from the Govt. of India Dept. of Education Health & Lands & its 6 Enclosures

2) Copy of Letter No GC 296-5 dated 25-9-35 from the Forest Collection with its enclosure

List of enclosures.....

3) Extract from Govt Note dated 22-10-1935 of the Chief Conservator of Forests

Copied by .....

Examined by.....

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

General and Revenue Secretariat

Dated, Bangalore, 21-11-1935

No. 46032

From

M. Venkatesa Iyengar, Esquire, M.A.,
General Secretary to the Government of His Highness the Maharaja of Mysore.

To

S. Abdul Wajid, Esquire, B.A.,
Director of Industries and Commerce in Mysore,
Bangalore.

Sir,

In forwarding herewith the communications noted in the margin in the matter of the cultivation of Medicinal plants and herbs in the Mysore State, I am directed to request you to kindly arrange to obtain and submit a note from Dr. K. Aswatha Narayana Rao, Superintendent of the Industrial and Testing Laboratory on the subject.

(1) Letter No. 59 XI 34-H dated 28-2-1935 from the Government of India, Departments of Education, Health and Lands and its enclosures,

(2) Copy of letter No. GC 29455 dated 25-9-1935 from the Senior Surgeon in Mysore together with its enclosure,

(3) Extract from Un-official Note dated the 22nd October 1935 of the Chief Conservator of Forests

The first of the communication sent in original may kindly be returned with your reply.

I have the honor to be,
Sir,
Your most obedient servant,

for General Secretary to Government.

P.H.

Telegraphic Address:—"INDUSCOM."

GOVERNMENT OF MYSORE.

DEPARTMENT OF INDUSTRIES AND COMMERCE.

GENL. & MIS. BRANCH. 3633 15 JAN. 1936 SECTT. & REV. SECTN.

GENERAL 13 JAN. 1936

In reply please refer to No. D2-202/35-36. Encl. 5/4.

OFFICE OF THE DIRECTOR,

Dated Bangalore, 11th January 1936.
13th.

Med. 328-34-7

FROM

S. Abdul Wajid, Esq., B.A.,
Director of Industries and Commerce in Mysore,
Bangalore (India).

To 13/1/36

M. Venkatesa Iyengar, Esq., M.A.,
General Secretary to the Government of Mysore,
Bangalore.

SIR,

Cultivation of Medicinal Plants and Herbs in the State.

With reference to correspondence ending with your letter No.G.5224/Med.328-34-4 dated 20th December 1935 on the above subject, I have the honour to forward herewith a note on the subject submitted by Dr.Aswathanarayana Rao. He suggests the constitution of a Committee to investigate the possibilities of the cultivation of medicinal plants and herbs in greater detail. I generally agree with the views expressed by Dr.Aswathanarayana Rao on the subject and recommend that action may be taken on the lines suggested by him.

The letter from the Government of India is returned herewith as desired.

I have the honour to be
Sir
Your most obedient servant

H.x. Ramiengar
For Director.
(absent from Head Quarters on Tour).

Mar

L.R

NOTE ON "THE CULTIVATION OF MEDICINAL PLANTS AND HERBS IN MYSORE STATE.

So long ago as May 1933, under instructions from the Officiating Dewan, attempts were made to examine the possibilities of getting the drugs required by the Laboratory, in the State as far as possible. Mr. M.S. Krishnaiengar, Forest Range Officer was also deputed for the purpose for a short time. No progress was however made.

A statement giving details of the drugs that are now being purchased by us and other data is enclosed herewith. As can be seen, except one or two, all the others are being imported from outside the State. It is sad to find that even drugs grown in India are more conveniently got from England, as it has been found difficult to get in touch with the actual producers in India and further, the genuineness of the drug in many cases is not assured. In addition to what we are purchasing, there must be plenty of other people in the State like Hakims, Ayurvadis Pandits,etc requiring parts of medicinal plants and herbs.

When Mr. H.S. Narayana Rao was District Forest Officer, Bangalore, I used to keep in touch with him, as he knew the resources of our forests intimately and managed to get one or two drugs in small quantities. But, the plants being found scattered all over the State, the cost of Collection of the required parts of the plants becomes prohibitive.

The Kashmir Government are doing very valuable and useful work in this direction, by having a Forest Utilization Division, who supply us genuine drugs. But freight from the northern part of Kashmir to Bangalore is enormous, being as much as Rs.200/- per ton.

It would be very useful if possibilities of cultivation of medicinal plants and herbs here could be investigated. It should be possible to grow at least such of the plants, as are grown in other tropical countries and in other parts of India. It is mentioned by the Economic Botanist, for instance, that Belladonnae and Digitalis

Digitalis have been tried and found to grow satisfactorily. We are buying the former one from Kashmir and can utilize the latter also if available.

In order to investigate the whole question fully, I beg to suggest the following arrangements in the first instance. A committee of the following officers to explore the possibilities of cultivation of the drugs likely to thrive locally and having a ready market here alone, may be appointed:-

1. Director of Industries and Commerce,
2. Senior Surgeon,
3. Director of Agriculture or the Economic Botanist,
4. Chief Conservator of Forests or District Forest Officer, Bangalore District,
5. Conservator of Forests, Shimoga,
6. Professor of Botany, Central College,
7. Superintendent of Horticulture.

It would be convenient if land about 50 acres in area as near Bangalore as possible is chosen for experiments. A special Forest Range officer who has been found to be good at cultivation will be necessary. All these details could be settled after the Committee is constituted and they decide on the programme of work.

I beg to place my services at the disposal of the Committee in any capacity.

K. Venkata Rao

Superintendent.
Govt. Industrial & Testing Laboratory

No.F.59-XI/34-H.

Government of India.

Department of Education, Health and Lands.

New Delhi, the 28th February, 1935.

From

R.H. Hutchings, Esquire, I.C.S.,

Addl. Deputy Secretary to the Govt. of India,

To

All local Governments and Administrations.

Recommendation made by the Drugs Enquiry Committee, 1930-31, regarding the cultivation of medicinal plants and herbs.

Sir,

I am directed to refer to a recommendation made by the Drugs Enquiry Committee, 1930-31, on page 170 of their report that every encouragement should be given to promote the cultivation of medicinal plants and herbs, and to ~~+~~ forward for the information of the local Government ~~your information~~ a copy of the papers the details of which are given in the annexed list.

I have, etc.,

Sd/- R.H. Hutchings,

Addl. Deputy Secretary.

List of papers.

1. Letter No.D.714/34/Vet., dated the 2nd August, 1934, from the Imperial Council of Agricultural Research to Lt. Col. Chopra, without enclosure.

2. Letter No.D673/V/34, dated the 23rd July, 1934, from the Imperial Council of Agricultural Research to Messrs. Smith Stanistreet and Co; Ltd., and the Bengal Chemical and Pharmaceutical Works, Limited.

3. Letter No. 162, dated the 26th September, 1934, from Lt. Col. Chopra to the Imperial Council of Agricultural Research, with enclosure.

4. Letter No.H.C./546, dated the 8th August, 1934, from Messrs. Smith Stanistreet and Co. Ltd., to the Imperial Council of Agricultural Research, with enclosure.

5. Letter No. 04M/1, dated the 17th December, 1934, from the Bengal Chemical and Pharmaceutical Works, Limited, to the Imperial Council of Agricultural Research, with enclosure.

6. List of the various medicinal plants which are largely used in the manufacture of preparations in the Drug Factories at the Medical Stores Depots, Bombay and Madras.

LETTER FROM THE IMPERIAL COUNCIL OF AGRICULTURAL RESEARCH, TO THE PROFESSOR OF PHARMACOLOGY, SCHOOL OF TROPICAL MEDICINE, CALCUTTA, NO. D.-714/34/VET., DATED THE 2ND AUGUST 1934.

I am directed to invite your attention to paragraph 2 (4) of the enclosed copy of the Report* of the Sub-Committee of the Advisory Board appointed to consider the schemes for investigations into indigenous drug plants of the United Provinces and the Punjab held at Simla on the 8th August 1933, of which you were a member, and to request you kindly to furnish this Department, as promised therein, with a note, on the possibilities of cultivable drugs and their possible areas, for publication in the Indian Journal of Agricultural Science.

2. I am to add that some local Governments have since sought the advice of the Council as to what medicinal plants would be the most suitable for Provinces to take up and in order to enable the Council to advise the Provinces on this point, it is necessary to know what drugs are at present consumed in India and imported in sufficient quantities to hold out a reasonable prospect of a satisfactory market. This Department is not in possession of the necessary information and would be greatly obliged for such details as you could supply which might be of assistance in this connection.

LETTER FROM THE IMPERIAL COUNCIL OF AGRICULTURAL RESEARCH TO 1. MESSRS. SMITH STANISTREET AND CO., LTD., STANISTREET HOUSE, 18, CONVENT ROAD, ENTALLY. 2. THE BENGAL CHEMICAL AND PHARMACEUTICAL WORKS, LTD., 31, CHITTARANJAN AVENUE (SOUTH), CALCUTTA, NO. D.-673/V/34, DATED THE 23RD JULY 1934.

I am directed to say that the Indian Drugs Enquiry Committee 1930-31 in their report has recommended *inter alia* that every encouragement should be given to promote the cultivation of medicinal plants. As a first step in this direction the Imperial Council of Agricultural Research has sanctioned the following three schemes, the first two of which have been financed and the third one is awaiting allotment of funds:—

(1) Research in systematic collection of medicinal plants and study of food poisons in India by Lieut.-Colonel R. N. Chopra.

(2) Investigation of Indian fish poisons in Mysore.

(3) Research into the indigenous drugs of India with special reference to their toxicology in Madras.

They have now been asked to advise as to what plants would be the most suitable for Provinces to take up and in order to do so it is necessary to know what drugs are at present consumed in India and imported in sufficient quantities to hold out a reasonable prospect of a satisfactory market.

This Department is not in possession of the necessary information and would be greatly obliged for such details as you can supply which might be of assistance in this connection.

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* Not received in E., H. and L. Department.

26. Blumea lacera—throughout India.
27. Boerhaavia diffusa—throughout India.
28. Butea frondosa—throughout India.
29. Caesalpinia bonducella—throughout India.
30. Calotropis gigantea—throughout India.
31. Cedrus libani—throughout India.
32. Cuminum cyminum—throughout India.
33. Datura stramonium—Punjab.
34. Euonymus crenulatus—Temperate and Western Himalayas.
35. Euphorbia pillulifera—throughout India.
36. Fumaria officinalis—Chittoor and Punjab.
37. Gaultheria fragrantissima—Nilgiris.
38. Gossypium herbaceum—throughout India.
39. Hedyotis auricularia.
40. Helleborus niger—throughout India.
41. Holarrhena antidysenterica—throughout India.
42. Hygrophilia spinosa—throughout India.
43. Ipomaea hederaceae—throughout India.
44. Ipomaea turpethum—throughout India.
45. Mallotus phillippinensis—throughout India.
46. Melia azadirachta—throughout India.
47. Ocimum basilicum—throughout India (O. gratissinum).
48. Oldenlandia biflora—throughout India.
49. Oroxylum indicum—throughout India.
50. Peganum harmala—N. W. India, Sind, Punjab, Kashmir, Agra and Western Deccan.
51. Petrosilinum sativum, P. graveolensis.
52. Picrasma quassioides—subtropical Himalayas and Kashmir.
53. Piper cubeba, P. betle—throughout India.
54. Plumbago rosea—throughout India.
55. Pongamia glabra—throughout India.
56. Psoralia corylifolia—throughout India.
57. Quercus infectoria—scattered throughout India.
58. Rauwolfia serpentina—tropical Himalayas and at the foot of the hills from Moradabad to Sikkim, Assam, Pegu, Travancore and Ceylon.
59. Saraca indica—throughout India.
60. Scopilia lurida—Central Himalayas, Nepal, Sikkim.
61. Semicarpus anacardium—throughout India.
62. Sida cordifolia—throughout India.
63. Solanum dulcamara, S. indicum—throughout India.
64. Swertia chirata—from Kashmir to Bhutan and Khasia range, at 4,000—10,000 feet.
65. Symplocos racemosa—throughout India.
66. Terminalia arjuna—throughout India.
67. Tinospora cordifolia—throughout India.
68. Toddalia aculeata—Nilgiris and from Kumaon to Bhutan, up to 5,000 feet.

30. Eucalyptus globulus—Himalayas.
31. Ferula foetida, Indian substitute F. narthex—Afghanistan.
32. Foeniculum vulgare—cultivated throughout India.
33. Gentiana lutea, Indian substitute G. kurroa—Kashmir, north-west Himalayas.
34. Glycyrrhiza glabra, introduced into Punjab and Sind.
35. Hyoscyamus niger and muticus—Kashmir and north-west Himalayas.
36. Juniper communis, macropoda—western Himalayas.
37. Linum usitatissimum—cultivated throughout India.
38. Lobelia inflata, Indian substitute, nicotianifolia—Bombay to Travancore and Ceylon.
39. Mentha arvensis and piperita—western Himalayas, also cultivated in gardens throughout India.
40. Myristica fragrans—cultivated in south India.
41. Papaver somniferum—Behar, U. P. and Punjab.
42. Peucedanum graveolens—throughout India.
43. Picroena excelsa—Kashmir and north-west Himalayas.
44. Picrorrhiza kurrooa-alpine Himalayas from Kashmir to Sikkim.
45. Pipenella anisum—cultivated throughout India.
46. Pinus longifolia—Himalayas.
47. Podophyllum emodi—N. W. Himalayas.
48. Polygala senega, Indian substitute, P. chinensis, crotalariodes—throughout India.
49. Psychotria ipecacuanha—cultivated in Nilgiris, Mungpoo, Burma.
50. Ricinus communis—cultivated throughout India.
51. Rheum emodi—Himalayas.
52. Santalum album—South India.
53. Strophanthus.
54. Strychnos nux vomica—specially south India, and Cuttack in Bihar and Orissa.
55. Taraktogenos kurzii and Hydnocarpus wightlana—Western Peninsula. South Concan to Travancore.
56. Thymus vulgaris (Corum copticum)—Indore and Nizam's dominions.
57. Urginea indica—throughout India.
58. Valeriana wallichii and officinale—N. W. Himalayas.
59. Zingiber officinale—cultivated throughout India.

COPY OF A LETTER FROM THE DIRECTOR, SMITH STANISTREET AND CO., CALCUTTA, TO THE SECRETARY, IMPERIAL COUNCIL OF AGRICULTURAL RESEARCH, NO. H.C./546, DATED THE 8TH AUGUST 1934.

In reply to your letter No. D.-673/V/34, of 23rd July 1934, we have pleasure in enclosing herewith a short list of imported crude drugs together with an estimated consumption in India and approximate prices.

It is unlikely, in our opinion, that the cultivation of these drugs alone would offer very much scope. If combined with the systematic collection and cultivation of indigenous drugs for export and the manufacture for export of commercial preparations as suggested in the remarks column on the enclosed list, a small industry might be developed particularly as the demand for these drugs will probably increase with the advance of Western medicine in this country.

Trusting you will find the enclosed list of assistance.

List of the various medicinal plants which are largely used in the manufacture of preparation in the drug factories at the Medical Store Depots, Bombay and Madras.

Name.	Natural order.	How purchased in the Depot and parts of India where grown (if grown at all).	Part used.	Approximate annual consumption.
				Lbs.
Aconite	Aconitum Napellus Linn	Imported—Himalyas, Kashmir, Punjab and N.-W. F. Province.	Root	600
Aloe	Cape, Curacao Socotrine or Zanzibar Aloe.	Local purchase—Official varieties are not grown ; other varieties of A Vera Linn in Madras Presidency, Bengal and N.-W. F. Province.	Liquid exuded from cut leaves evaporated to dryness.	920
Ammoniacum	Dorema Ammoniacum	Local purchase	Gum resin exuded from flowering or fruiting stem.	40
Anethi	Anethum Graveolens Linn	Local purchase—All over India	Fruit	7,500
Arnicæflores	Arnica Montana Linn	Imported	Dried flower heads	10
Asafœtida	Ferula Asafœtida Linn / Ferula Ftœida and other species of Ferula.	Local purchase—Kashmir, Punjab, N. W. F. Province.	Oleo-gum resin got by incision from living Rhizoma and root.	450
Auranti	Citras Aurantium Linn	Local purchase—Most parts of India	Peel dried	2,000
Belæ	Aegle Marmelos Correa	Local purchase —All over India	Fruit	500
Belladonnæ	Atropa Belladonna Linn	Local purchase—Simla to Kashmir.	Leaves and root	3,800 / 6,000
Benzoin	Styrax Benzoin Dryand	Local purchase	Balsamic resin from incised stem.	450
Buchu	Barosma Belulina Bart. and Wendl.	Imported	Leaf	1,300
Calumba	Jateorhiza Calumba miers	Local purchase	Root	350
Camphor	Cinnamomum Camphora, T. Nees and Eberm.	Local purchase	While crystalline substance got from the wood of the tree.	3,000
Cannabis Indica	Cannabis Sativa Linn	Local purchase—More or less throughout India.	Dried flowering or fruiting top	100
Capsicum	Capsicum minimum Roxb	Local purchase—Throughout India.	Dry ripe fruit	20
Cardamom	Elettaria cardamomum Maton var. minuscula Burkhill.	Local purchase—Malabar, Mysore, generally in South India.	Fruit	1,000
Caraway	Carum Carvi Linn	Local purchase—Plains of India	Fruit	150
Caryophyllum	Eugemia Aromatica (Linn.) Baill.	Local purchase—South India	Fruit	850
Cascara Sagrada	Rhamnus Purshiana DC.	Imported	Dried bark	3,000
Cassia	Cassia Fistula Linn	Local purchase—All over India—particularly North India especially sub-Himalayan tracts.	Ripe fruit	18
Castor seeds	Ricinus Communis Linn	Local purchase—All over India	Seeds	400,000
Chirata	Swertia Chirata, Buch—Ham	Local purchase—Nepal, Bhutan and North India.	Whole plant collected when flowering and dried.	3,000
Cinchona	Cinchona Calisaya Weddell, C. Ledgeriana Moens. C. Officinalis Linn., C. Succirubra Pavon, and Hybrids of last two with first two.	Local purchase—Madras and Bengal.	Bark	600
Cinnamom	Cinnamomum Zeylanicum Nees	Local purchase —South India	Bark	1,700
Colchicum corm	Colchicum autumnale Linn	Imported	Corm and seeds	150
Catechu Nigrum	Acacia Catechu willd	Local purchase—Most parts of India.	Extract from wood	450
Colocynth	Citrullus Colocynthis Schrad	Imported—North-West, Central and South India.	Dried pulp of fruit	50
Coriander	Coriandrum Sativum Linn	Local purchase—All over India	Fruit	200
Digitalis	Digitalis purpurea Linn	Imported	Leaf	600
Figs	Ficus Carica Linne	Local purchase—N.-W. F. Province, Punjab, West Himalayas, Sind, Baluchistan.	Fruit	24
Fæniculi	Fæniculum vulgare mill	Local purchase—Throughout India.	Fruit	200
Gallæ	Quercus Infectoria Olivier	Local purchase	Nuts	300
Gelsemii	Gelsemium Nitidum Michaux	Imported	Root	20
Gentian	Gentiana Lutea Linn	Imported	Root	5,500
Glycyrrhizæ	Glycyrrhiza Glabra Linn. and other species	Local purchase	Root	7,250
Hamamelis	Hamamelis Virginiana Linn.	Imported	Leaves	300
Hydnocarpus	Hydnocarpus Wightiana Blume	Local purchase—West coast hill ranges.	Oil from the seeds	18,000
Hydrastis	Hydrastis Canadensis Linne	Imported	Dried Rhizoma and root	50
Hyoscyamus	Hyoscyamus Niger Linn.	Imported—Western Himalayas from Kashmir to Garhwal.	Leaves	1,000
Ipecac	Cephælis Ipecacuanha (Brot.) A. Rich.	Imported	Root	1,500

available ones are underlined.

Proceedings of the Government of His Highness the Maharaja of Mysore.

Order No.

Dated Bangalore, the 8th February 1936.

Government consider it desirable that the possibilities of cultivation of medicinal plants and herbs in the Mysore State should be investigated and are pleased to sanction the appointment of a committee for the purpose constituted as follows:-

1. The Senior Surgeon in Mysore (Chairman)
2. The Chief Conservator of Forests.
3. ~~The Economic Botanist in Mysore.~~ Dr. V. K. Bajaj, Dy Dir of Agriculture
4. The Professor of Botany, Central College, Bangalore.
5. The Superintendent, Government Gardens in Mysore.
6. Dr. K. Aswathanarayana Rao,
   Superintendent, Industrial and
   Testing Laboratory. - (Secretary.)

The Committee is requested to consider what medicinal plants and herbs can be grown in the State with advantage and to suggest the measures that might be adopted to promote their cultivation.

General Secretary to Government.

To

The Senior Surgeon in Mysore.

" Chief Conservator of Forests in Mysore.

" Director of Industries and Commerce in Mysore.

" ~~Economic Botanist~~ in Mysore.

" Registrar, Mysore University.

" Superintendent, Government Gardens in Mysore.

B.F.".10.

G. R. S. App. F VI—G 2]

SUBJECT .....

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Diary No. of letter replied to D3633

Section Med.

File No. 325-14-

Serial No. 8

General and Revenue Secretariat

( )

the *193* .

Proceedings of the Government of His Highness the Maharaja of Mysore.

Date of issue 193

Signed by .....

Read—

May this be—

(i) printed ?

(ii) treated as a standing order ?

(iii) published in the Gazette, English Part ?

(iv) translated ?

(v) placed at the disposal of the press ?

(vi) published in the Gazette Kannada Part ?

Order ~~thereon~~.—No.

Govt consider it desirable that the possibilities of cultivation of Medicinal plants & herbs in the Mysore State should be investigated ~~Govt~~ observe that it should be possible to grow in Mysore at least such of the plants as are grown in other tropical countries and in other parts of

Proceedings of the Government of His Highness the Maharaja of Mysore.

Order No.

G. 6590-6 Medl. 528-34-8
Dated Bangalore, the 11th February 1936.

Government consider it desirable that the possibilities of cultivation of medicinal plants and herbs in the Mysore State should be investigated and are pleased to sanction the appointment of a committee for the purpose constituted as follows:-

1. The Senior Surgeon in Mysore (Chairman).
2. The Chief Conservator of Forests in Mysore.
3. Dr. V. K. Badami, Deputy Director of Agriculture.
4. The Professor of Botany, Central College, Bangalore.
5. The Superintendent, Government Gardens in Mysore.
6. Dr. K. Aswathanarayana Rao,
   Superintendent, Industrial and
   Testing Laboratory. - (Secretary).

The Committee is requested to consider what medicinal plants and herbs can be grown in the State with advantage and to suggest the measures that might be adopted to promote their cultivation.

B Muddenna
General Secretary to Government.

To

The Senior Surgeon in Mysore.
" Chief Conservator of Forests in Mysore.
" Director of Industries and Commerce in Mysore.
" Director of Agriculture in Mysore.
" Registrar, Mysore University.
" Superintendent, Government Gardens in Mysore.

S.R.V.S

MYSORE MEDICAL DEPARTMENT

med. 328-34-7

Telephone **No. 215**

OFFICE OF THE SENIOR SURGEON IN MYSORE,

No. C.C. 294-7
Enc. 2.

Bangalore, dated the 8-5-*1936.*

GENL. & [illegible] 5908 9. MAY 1936 SECRETARIAT

FROM

SASTRAVAIDYA PRAVINA
S. SUBBA RAO, ESQ., B.A., M.B.C.M., M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H.,
Senior Surgeon with the Government of H. H. the Maharaja of Mysore.

9 MAY 1936

To

The General Secretary to the Government of
His Highness the Maharaja of Mysore, Bangalore.

Sir,

With reference to your letter No. G.9819/Med.328-34 dated the 2nd May 1936 calling for a report of the committee to consider what medicinal plants and herbs could be grown in the State, I have the honour to forward a copy of the proceedings of the first meeting of the committee held in my office on the 8th April 1936. The committee is meeting again on the 9th instant to discuss the proposals further and to formulate a final report.

OFFICE OF THE SECOND MEMBER OF COUNCIL 9 MAY 1936 No. 8698

Subd for perusal

I have the honour to be,
Sir,
Your most obedient servant,

S. Subba Rao
Senior Surgeon.

Secd Member

DSR.

GEN. 16.

Letter No.3824-5 dated 11-4-1936, from the Superintendent, Government Industrial and Testing Laboratory, Malleswaram, Bangalore City, to the Senior Surgeon in Mysore, Bangalore.

A meeting of the Committee appointed for investigating the possibilities of medicinal plants and herbs in the Mysore State, was held in the Office of the Senior Surgeon in Mysore under the presidency of Dr. S.Subba Rao. All the members of the Committee except the Professor of Botany, Central College were present.

The Secretary submitted a list of the drugs that were being purchased at present by the Industrial and Testing Laboratory so that if those drugs could be grown here, to that extent the need for going outside the State would be saved.

On a preliminary examination, the Economic Botanist, the Superintendent, Government Gardens and the Chief Conservator of Forests felt that certainly a good number of them could be grown in Mysore State, but that some preliminary work in this connection was necessary.

These three officers were good enough to agree to get work done in their respective Departments.

It was decided to send to all the members of the Committee a list of the drugs that are being purchased by the Laboratory at present so that the matter could be investigated in detail by each of them and definite proposals given at the next meeting of the Committee to be held in the first week of May.

I enclose herewith a copy of the list for your kind information.

"Copy".

S. Subba Rao

Senior Surgeon.

CSR.

Sl. No.	Common Name.	Botanical Name.	Consumption during 1934-35.	Rate per cwt.	Purchased from.
1.	Belladonna root	Dried root of Atropa Belladonna Linn	6 cwts.	Rs.33/-	Kashmir.
2.	Belladonna leaves	Leaves of Atropa Belladonna Linn	1 "	59/-	"
3.	Cardamoms	Elettaria Cardamomum	1 "	147/-	Sakalespur.
4.	Caraway fruit	Carum Carvi Linn	¼ "	106/-	Local.
5.	Cinchona bark	Cinchona Succirubra Pavon	1 "	31/-	Calicut.
6.	Cinnamon bark	Cinnamomum Leylarieum nees	1 "	21/-	Local.
7.	Cloves	Engenia aromatica Linn	8 lbs.	57/-	"
8.	Cochineal	Dactylopius Co-ccus costa	½ cwts.	123/-	"
9.	Calumba	Jateorhiza palmata		25/-	Europe.
10.	Buchu	Barosma betuline	28 lbs.	74/-	"
11.	Fennel fruit	Foeniculum vulgare Mill	28 "	24/-	Local.
12.	Glycyrrhizae unpeeled	Glycyrrhiza Glabra Linn	2 cwts.	24/-	Local.
13.	Glycyrrhizae peeled	Glycyrrhiza Glabra Linn	½ "	65/-	Europe.
14.	Gentian	Gentiana Lutea Linn	3 "	52/-	Europe.
15.	Ginger	Zingiber Officinale Roseoe	4 "	47/-	Calicut.
16.	Ipecac	Cephaelis Ipecacuanha (Brot) A Rich	11 lbs.	500/-	Europe.
17.	Jalap	Ipomoea Purga Hayne	-	106/-	Europe.
18.	Hydrastis	Hydrastis Canadenaia Linn	-	494/-	"
19.	Rhubarb	Rheum Palmatum Linn	-	196/-	"
20.	Male fern	Dryopteris Filinmas Linn	-	57/-	"
21.	Colocynthidis	Citrullus Colocynthis Schrad	6 lbs.	100/-	"
22.	Lobelia	Lobelia inflata Linn	2 cwts.	163/-	"
23.	Grindelia	Grindelia Camporum Greene	2½ "	52/-	"
24.	Valerian roots	Valeriana Officinalis Linn	-	65/-	"
25.	Nutmeg	Myristica fragrans Houtt	28 lbs.	56/-	Local.
26.	Nux Vomica	Strychues Nux Vomica Linn	4 cwts.	8/-	Forest Department, Govt. of Mysore.
27.	Scillae	Urginea Scilla Steinh	2½ "	32/-	Europe.
28.	Senna leaves	Cassia acutifolia Delile and Cassia angustifolia Vahl	12 lbs.	9/-	Local.
29.	Taraxaci root	Taraxacum officinale wiggers	2 tons.	-	Kashmir & Europe.
30.	Serpentary rhizome	Aristolochia reticulate Nutt	56 lbs.	177/-	Europe.
31.	Senega	Polygala Senega Linn	2½ cwts.	146/-	"
32.	Hyoscyami	Hyoscyamus niger Linn	1½ "	57/-	Kashmir & Europe.
33.	Digitalis.				

"Copy".

S. Subba Rao
Senior Surgeon.

MYSORE MEDICAL DEPARTMENT

6089

Telephone—No. 215

OFFICE OF THE SENIOR SURGEON IN MYSORE

No. G.C.294-9
Enc. 2.

Bangalore, dated the 16-5- 1936.

med. 328-34-9

From

Sastravaidya Pravina

S. SUBBA RAO, Esq., B.A., M.B.C.M., M.R.C.S., (Eng.) L.R.C.P., D.P.H.,

Senior Surgeon with the Government of H. H. the Maharaja of Mysore.

GENERAL SECRETARIAT
19 MAY 1936

The General Secretary
to the Government of H.H. the Maharaja of Mysore,
Bangalore.

Sir,

In continuation of my letter No. G.C. 294-7 dated the 8th May 1936, regarding the growth of medicinal plants in the State, I have the honour to forward for the information of Government a report of the decisions arrived at by the Committee at their second meeting held on the 9th instant.

I understant that Dr. K. Aswathanarayana Rao is resigning his post. If Government consider that the work of this Committee has to be continued further, Mr. Aswathanarayana Rao's successor in Office may be appointed as Secretary of the Committee.

I have the honour to be,

Sir,

Your most obedient servant,

S. Subba Rao

Senior Surgeon.

Ref: G.O.No. G.6390-6/ Medl. 328-34-8 dated 11/15th Feb. 1936.

Report of the Committee appointed for investigating the possibilities of cultivation of Medicinal Plants and Herbs in the Mysore State.

Two meetings of the Committee were held in the Office of the Senior Surgeon in Mysore who is the chairman of the Committee. All the members of the Committee were present at both the meetings except the Professor of Botany, Central College, Bangalore who was absent on both the occasions.

The first meeting was held on 8th April 1936. Some preliminary discussion took place at this meeting and it was decided that the Secretary should supply the members of the Committee a list of drugs at present being purchased by the Government Industrial and Testing Laboratory for their pharmaceutical manufactures, so that the members could study the possibilities of the different drugs thriving locally. This was done.

The next meeting of the Committee was held on 9th May 1936. The subject naturally divided itself to (a) the plants which are known to grow well in Mysore State and (b) those which have to be experimented upon now.

Naturally, in the second category, the experimental part of the work has to be done for the present on a small scale by the Superintendent of Government Gardens, Bangalore and Dr. V.K. Badami, Deputy Director of Agriculture in the Agricultural Farms.

The list of drugs purchased by the Laboratory is enclosed herewith. It is understood that items No.3 Cardamoms and 15 Ginger are grown in the Agricultural Farms by the Agricultural Department at present. It was suggested that instead of these drugs being disposed off to private parties, the Laboratory might buy them direct from the Agricultural Department. This will be done.

The general policy decided on was for the Superintendent of Government Gardens to purchase the seeds from the available places,

raise

seedlings in his nursery at Lal Bhag and hand over the seedlings to Dr. V.K. Badami, Deputy Director of Agriculture who has kindly agreed to take care of them afterwards.

Among the drugs in the list, those which are known to grow locally have been marked with an asterisk (*). Those which require investigation and which are going to be investigated have been marked with a question (?) mark. Those which are definitely known not to grow here are left without any suffix.

The discussion naturally concentrated itself on Cinchona, since, Quinine is the largest single purchase by the Medical Department. It is known that Cinchona Officinalis and Succirubra can be grown in the State. Although they will not be the ideal sources of Quinine, the total alkaloids in them can be utilized for the manufacture of Totaquina, the deficiency in Quinine being made up artificially.

It was arranged that the Chief Conservator of Forests will send 1 cwt. of the bark of Cinchona available locally to the Laboratory where, the possibility of manufacturing Totaquina from it will be investigated. It was also arranged that the Forest Department in cooperation with the Superintendent of Government Gardens will try a large scale cultivation of Cinchona near Kalhatti. Cinchona Calsaya will be tried in Marthur Farm by the Agricultural Department.

It was also arranged that the ~~Cinchona~~ Cinnamon bark locally grown will be sent by the Superintendent of Government Gardens and the Chief Conservator of Forests to the Laboratory to test its oil content and quality of the oil.

It is understood that Erythroxylon Coca is available in the State. The Superintendent of Government Gardens agreed to send samples to the Laboratory for determining the content of Cocaine, so that the possibility of manufacturing Cocaine may be investigated. The Superintendent of Government Gardens has also kindly agreed to send Storax to the Laboratory for test and opinion.

Kaiser Raza — SECRETARY.

S. Subba Rao — Chairman.

List of Drugs that are being purchased by the Laboratory.

Sl.No.	Common Name.	Botanical Name.	Purchased from.
1	* Belladonna root	Dried root of Atropa Belladonna Linn	Kashmir.
2	* Belladonna leaves	Leaves of Atropa Belladonna Linn	"
3	* Cardamoms	Elettaria Cardamomum	Sakalespur.
4	* Caraway fruit	Carum Carvi Linn	Local.
5	* Cinchona bark	Cinchona Succirubra Pavon	Calicut.
6	* Cinnamon bark	Cinnamomum Zeylaricum nees	Local
7	Cloves	Engenia aromatica Linn	"
8	Cochineal	Dactylopius Cocaus Costa	"
9	* Calumba	Jateorhize Palmata	Europe
10	* Buchu	Borosma Betuline	"
11	* Fennel fruit	Foeniculum vulgare Mill	Local
12	Glycyrrhizae unpeeled	Glycyrrhiza Glabra Linn	"
13	Glycyrrhizae peeled	Glycyrrhiza Glabra Linn	Europe
14	? Gentian	Gentiana Lutea Linn	"
15	* Ginger	Zingiber Officinale Roscoe	Calicut
16	? Ipecac	Cephaelis Ipecacuanha (Brot) A Rich	Europe
17	? Jalap	Ipomoea Purga Hayne	"
18	Hydrastis	Hydrastis Canadenaia Linn	"
19	Rhubarb	Rheum Palmatum Linn	"
20	Male fern	Dryopteris Filinmas Linn	"
21	* Colocynthidis	Citrallus Colocynthis Schrad	"
22	? Lobelia	Lobelia Inflata Linn	"
23	Grindelia	Grindelia Camporum Greene	"
24	? Valerian roots	Valeriana Officinalis Linn	"
25	Nutmeg	Myristica Fragrans Houtt	Local
26	Nux Vomica	Strychues Nux Vomica Linn	Forest Department (Government of Mysore).
27	? Scillae	Urginea Scilla Steinh	Europe
28	? Senna leaves	Cassia acutifolis Delile & Cassia Angustifolia Vahl.	Local
29	? Taraxaci root	Taraxacum Officinale Wiggers	Kashmir & Europe.
30	? Serpentary rhizome	Aristolochia Recticulate Nutt	Europe
31	? Senegae	Polygala Senega Linn	"
32	Hyoscyami	Hyoscyamus Niger Linn	Kashmir & Europe.
33	? Digitalis		

* Those which are known to grow locally.
? Those which require investigation and which are going to be investigated.

PRF-8).

SECRETARY.

Appendix F G—1]

SUBJECT.....

.....

.....

Section Med.

File No. 328-314

Serial No. 11

Diary No. of letter replied to.....

No. 5979

To

Dr Henri Fougeron

Sir,

General and Revenue Secretariat

( )

the *193* .

I am commanded by the Committee appointed to report on the growth of medicinal plants in the State to request you to send a special report making clear the actions recommended at the last meeting of the committee, ~~you may call~~ for further meetings if necessary. Dr K. Ashwathanarayana Rao may succeed Dr Secretary may be appointed in his place as proposed by you.

Date of issue 5/6/36

Signed by for M. to C.S.

List of enclosures.....

Copied by .....

Examined by 8/6/36

GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE

General and Revenue Secretariat

No. G. 9784 G. Dated, Bangalore, 3rd June 1936

From

The General Secretary to the Government of His Highness the Maharaja of Mysore.

To

The Senior Surgeon in Mysore,
Bangalore.

Sir,

With reference to the correspondence ending with your letter No. G.C. 294-9, dated 16th May 1936 regarding the growth of medical plants in the State, I am directed to request you to send a final report making clear the action recommended after further meetings of the Committee if necessary. Dr. K. Aswathanarayana Rao's successor may be appointed as Secretary in his place as proposed by you.

I have the honor to be,
Sir,
Your most obedient servant,

for General Secretary to Government

TRM.2

MYSORE MEDICAL DEPARTMENT

Telephone—**No. 215**

OFFICE OF THE SENIOR SURGEON IN MYSORE,

No. G.C.294-12-
Enc.

Bangalore, dated the 29.6. *193* .

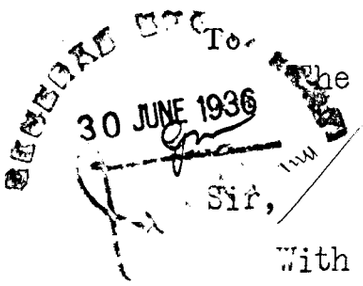
Med. 328-34-17,

From

Sastravaidya Pravina

S. SUBBA RAO, Esq., B.A., M.B.C.M., M.R.C.S., (Eng.) L.R.C.P., D.P.H.,

Senior Surgeon with the Government of H. H. the Maharaja of Mysore.



To

The General Secretary to the Government of
His Highness the Maharaja of Mysore, Bangalore.

Sir,

With reference to your letter No.G.9781/Med.328-34-11 dated the 3rd/5th Instant asking me to submit a final report regarding medicinal plants, I have the honour to state that a definite scheme of action has been outlined for adoption, principal among which are (1) the purchase of seeds from the available places and the raising of seedlings in the Lalbagh Nursery (2) the investigation in the Testing Laboratory of the possibility of manufacturing Totaquina from the Cinchona available locally (3) the introduction conjointly by the Forest and Gardens Departments of a large scale cultivation of Cinchona near Kalhatti and (4) the initiation of experiments in the Laboratory to determine (a) the oil content of locally grown Cinnamon bark and (b) the content of Cocaine in Erythroxylon Coca which is available in the State with a view to take up the manufacture of Cocaine.(Please vide Report submitted with my letter No.G.C.294-9 dated the 16th May 1936). If this programme is approved by Government, preliminary action will be taken accordingly progress reports will be submitted from time to time, whenever any tangible result is attained.

I request early orders.

I have the honour to be,

Sir,

Your most obedient servant,

S. Subba Rao.

Senior Surgeon.

Med.328-34-13

Proceedings of the Government of
H.H. the Maharaja of Mysore.

R e a d:-

G.O.No.G.6390-6/Med.328-34-8 dated 8/15th February 1936, constituting a committee consisting of the marginally noted officers to investigate and report what medicinal plants and herbs can be grown in the State and suggest measures to promote their cultivation.

The Senior Surgeon, (Chairman).
2. The Chief Conservator of Forests.
3. Dr. V.K. Badami, Dy. Dir. of Agri.
4. The Professor of Botany Central College, B'lore.
5. The Supdt. Govt. Gardens.
6. Dr. K. Aswathanarayana-Rao, Supdt. Industrial and Testing Laboratory. (Secretary.)

2. Correspondence ending with letter No.Gc.294-12 dated 29th June 1936, from the Senior Surgeon forwarding a report of the decisions arrived at by the Committee (printed as annexure) and stating that if the programme proposed is approved, preliminary action will be taken accordingly.

ORDER NO. 91587-92

Dated, 30 May 1936.

The Committee directed their consideration mainly to the drugs now purchased by the Industrial and Testing Laboratory for their pharmaceutical manufactures and the report outlines the following scheme of action:

(1) the purchase of seeds from the available places and the raising of seedlings in the Lal-bagh Nursery; for experimental cultivation by the Agricultural Department.

(2) the investigation in the Testing Laboratory of the possibility of manufacturing tobaquina from the cinchona available locally;

(3) the introduction conjointly by the Forest and Gardens departments of a large scale cultivation of cinchona near Kalhatti, a n d

(4) the initiation of experiments in the laboratory to determine (a)

(a) the oil content of locally grown cinnamon bark and (b) the content of cocaine in Erythroxylon coca which is available in the State with a view to take up the manufacture of cocaine.

Government are pleased to approve the above scheme and direct that action may be taken accordingly. A half yearly progress report may be submitted for the information of Government.

B. H. Krishna Chief Chemist ~~Mr. K. Parthasarathy Iyengar~~ ~~who was in charge of this field~~ ~~work at~~ Hosting Kakavaliary will do his duties of the Secy to the Committee in place of Mr. K. Aswatha Narayana Rao.

DRAFT)
21/9/36
Genl: Secry to Govt.

24.9.36

The Senior Surgeon in Mysore. 10
" Chief Conservator of Forests. 5
" Director of Industries and Commerce. 6
" Director of Agriculture in Mysore 6
" Registrar, Mysore University. X 3
" Superintendent, Govt. Gardens.

K.M.R.1.

S. O.

Government of his Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. G. 1587-92—Med. 328-34-13, dated 27th August—3rd September 1936.

Medicinal Plants and Herbs.

Passes orders on the report of the Committee to investigate what —— can be grown in the State and suggest measures to promote their cultivation.

READ—

Government Order No. G. 6390-6—Med. 328-34-8, dated 8—15th February 1936, constituting a Committee consisting of the marginally noted officers to investigate and report what medicinal plants and herbs can be grown in the State and suggest measures to promote their cultivation.

1. The Senior Surgeon (Chairman).
2. The Chief Conservator of Forests.
3. Dr. V. K. Badami, Deputy Director of Agriculture.
4. The Professor of Botany, Central College, Bangalore.
5. The Superintendent, Government Gardens.
6. Dr. K Aswathanarain Rao, Superintendent, Industrial and Testing Laboratory (Secretary).

2. Correspondence ending with letter No. Gc. 294-12, dated 29th June 1936, from the Senior Surgeon, forwarding a report of the decisions arrived at by the Committee (printed as annexure) and stating that if the programme proposed is approved, preliminary action will be taken accordingly.

ORDER NO. G. 1587-92—MED. 328-34-13, DATED BANGALORE, THE 27TH AUGUST—3RD SEPTEMBER 1936.

The Committee directed their consideration mainly to the drugs now purchased by the Industrial and Testing Laboratory for their pharmaceutical manufactures and the report outlines the following scheme of action:—

(1) the purchase of seeds from the available places and the raising of seedlings in the Lal-bagh Nursery, for experimental cultivation by the Agricultural Department;

(2) the investigation in the Testing Laboratory of the possibility of manufacturing Tobaquina from the Cinchona available locally;

(3) the introduction conjointly by the Forest and Gardens Departments of a large scale cultivation of Cinchona near Kalhatti; and

(4) the initiation of experiments in the Laboratory to determine (*a*) the oil content of locally-grown Cinnamon bark, and (*b*) the content of Cocaine in Erythroxylon Coca which is available in the State with a view to take up the manufacture of Cocaine.

2. Government are pleased to approve the above scheme and direct that action may be taken accordingly.

3. Mr. B. H. Krishna, Chief Chemist, Industrial and Testing Laboratory, will do the duties of the Secretary to the Committee in place of Dr. K. Aswathanarain Rao.

4. A half-yearly progress report may be submitted for the information of Government.

H. H. C. Srinivasaiah

Secretary to Government,
General Department.

To—The Senior Surgeon in Mysore.
The Chief Conservator of Forests in Mysore.
The Director of Industries and Commerce in Mysore.
The Director of Agriculture in Mysore.
The Registrar, Mysore University.
The Superintendent, Government Gardens.

Exd.—B. G. S.

No. G. 1587-92—MED. 328-34-13, DATED 27TH AUGUST—3RD SEPTEMBER 1936.

List of Drugs that are being purchased by the Laboratory.

Sl. No.	Common Name	Botanical Name	Purchased from
1	*Bolladonna root ...	Dried root of Atropa Belladonna Linn ...	Kashmir
2	*Belladonna leaves ...	Leaves of Atropa Belladonna Linn ...	Do
3	*Cardamoms ...	Elettaria Cardamomum ...	Saklespur
4	*Caraway fruit ...	Carum Carvi Linn ...	Local
5	*Cinchona bark ...	Cinchona Succirubra Pavon ...	Calicut
6	*Cinnamon bark ...	Cinnamomum Zeylaricum nees ..	Local
7	Cloves ...	Engenia Aromatica Linn ...	Do
8	Cochineal ...	Dactylopius Coccus Costa ...	Do
9	*Calumba ...	Jateorhize Palmata ...	Europe
10	*Buchu ...	Borosma Betuline ...	Do
11	*Fennel fruit ...	Fœniculum Vulgare Mill ...	Local
12	Glycyrrhizæ unpeeled ...	Glycyrrhize Glabra Linn ...	Do
13	Glycyrrhizæ peeled ...	Glycyrrhiza Glabra Linn ...	Europe
14	†Gentian ...	Gentiana Lutea Linn ...	Do
15	*Ginger ...	Zingiber Officinale Roscœ ...	Calicut
16	†Ipecæ ...	Cephælis Ipecacuanha (Brot) A Rich ...	Europe
17	†Jalap ...	Ipomœa Purga Hayne ...	Do
18	Hydrastis ...	Hydrastis Canadenaia Linn ...	Do
19	Rhubarb ...	Rheum Palmatum Linn ...	Do
20	Male fern ...	Dyyopteris Filinmas Linn ...	Do
21	*Colocynthidis ...	Citrallus Colocynthis Schrad ...	Do
22	†Lobelia ...	Lobelia Inflata Linn ...	Do
23	Grindelia ...	Grindelia Camporum Greene ...	Do
24	†Valerian roots ...	Valeriana Officinalis Linn ...	Do
25	Nutmeg ...	Myristica Fragrans Houtt ...	Local
26	Nux Vomica ...	Strychues Nux Vomica Linn ...	Forest Department (Govt. of Mysore.)
27	†Scillæ ...	Urginea Scilla Stenh ...	Europe
28	†Senna leaves ...	Cassia Acutifolis Delile and Cassia Angustifolia Vahl.	Local
29	†Taraxaci root ...	Taraxacum Officinale Wiggers ...	Kashmir and Europe
30	†Serpentary rhizome ...	Aristolochia Recticulate Nutt ...	Do
31	†Senegæ ...	Polygala Senega Linn ...	Do
32	Hyoscyami ...	Hyoscyamus Niger Linn ...	Europe
33	†Digitalis ...	...	Kashmir and Europe

* Those which are known to grow locally.
† Those which require investigation and which are going to be investigated.

WD 396—GPB—430—8-9-36

S. O.

Government of his Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS.

G. O. No. G. 1587-92—Med. 328-34-13, dated 27th August—3rd September 1936.

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M. VENKATESA IYENGAR,
Secretary to Government,
General Department.

To—The Senior Surgeon in Mysore.
The Chief Conservator of Forests in Mysore.
The Director of Industries and Commerce in Mysore.
The Director of Agriculture in Mysore.
The Registrar, Mysore University.
The Superintendent, Government Gardens.

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4	*Caraway fruit ...	Carum Carvi Linn ...	Local
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6	*Cinnamon bark ...	Cinnamomum Zeylaricum nees ..	Local
7	Cloves ...	Engenia Aromatica Linn ...	Do
8	Cochineal ...	Dactylopius Coccus Costa ...	Do
9	*Calumba ...	Jateorhize Palmata ...	Europe
10	*Buchu ...	Borosma Betuline ...	Do
11	*Fennel fruit ...	Fœniculum Vulgare Mill ...	Local
12	Glycyrrhizæ unpeeled ...	Glycyrrhize Glabra Linn ...	Do
13	Glycyrrhizæ peeled ...	Glycyrrhiza Glabra Linn ...	Europe
14	†Gentian ...	Gentiana Lutea Linn ...	Do
15	*Ginger ...	Zingiber Officinale Roscœ ...	Calicut
16	†Ipecæ ...	Cephælis Ipecacuanha (Brot) A Rich ...	Europe
17	†Jalap ...	Ipomœa Purga Hayne ...	Do
18	Hydrastis ...	Hydrastis Canadenaia Linn ...	Do
19	Rhubarb ...	Rheum Palmatum Linn ...	Do
20	Male fern ...	Dyyopteris Filinmas Linn ...	Do
21	*Colocynthidis ...	Citrallus Colocynthis Schrad ...	Do
22	†Lobelia ...	Lobelia Inflata Linn ...	Do
23	Grindelia ...	Grindelia Camporum Greene ...	Do
24	†Valerian roots ...	Valeriana Officinalis Linn ...	Do
25	Nutmeg ...	Myristica Fragrans Houtt ...	Local
26	Nux Vomica ...	Strychues Nux Vomica Linn ...	Forest Department (Govt. of Mysore.)
27	†Scillæ ...	Urginea Scilla Stenh ...	Europe
28	†Senna leaves ...	Cassia Acutifolis Delile and Cassia Angustifolia Vahl.	Local
29	†Taraxaci root ...	Taraxacum Officinale Wiggers ...	Kashmir and Europe
30	†Serpentary rhizome ...	Aristolochia Recticulate Nutt ...	Do
31	†Senegæ ...	Polygala Senega Linn ...	Do
32	Hyoscyami ...	Hyoscyamus Niger Linn ...	Europe
33	†Digitalis ...	...	Kashmir and Europe

* Those which are known to grow locally.
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WD 396—GPB—430—8-9-36